

THURSDAY, APRIL 24, 1884

THE EDINBURGH UNIVERSITY FESTIVAL

THE brilliant celebration of its three hundredth anniversary by the University of Edinburgh last week suggests some reflections on the connection between University progress and the growth of Science. One of the most remarkable features in these festive proceedings has been the preponderance given to the recognition of the claims of scientific research to University distinction. A hundred years ago and less, had such a gathering been thought of, the great men who would have been invited to receive the highest academic honours would have been learned scholars, eminent professors of the mediæval branches of education, with perhaps a few distinguished medical men and doubtless a good many candidates whose only claim would have been the possession of a hereditary title of nobility. But now a new host of competitors has arisen, and upon them have the laurels of the University been mainly bestowed. Physicists, chemists, physiologists, botanists, geologists, and other representatives of modern science have almost elbowed the older philosophies out of the field. In the pæan sung at every meeting of the festival the brilliance of scientific discovery, the prowess of scientific discoverers, and the glory shed on the University by its connection with both have been the chief themes.

This great change in the objects of University recognition has been silently in progress for several generations. But it has never been so openly and strikingly proclaimed as during these recent meetings at Edinburgh. It is not that any formal alteration has there been made in the curriculum of study. On the contrary, the same subjects are still required for degrees in Arts as were demanded centuries ago. Outside the conservative government of the University there has, however, been a steady growth of modern ideas, modern life, and modern science. To the Medical School, in the first place, must the credit be assigned of fostering this wider culture. Its professors have thrown open their old monopoly of teaching, and work harmoniously with their competitors outside the walls of the University. They have cast aside the ancient inefficient system of mere prelections, and have introduced practical teaching into every branch of their science. To pass from the state of things in the youth of these teachers to what they have now made it is to cross a gulf such as might be thought to mark an interval of some centuries. Everywhere we see practical scientific research taking the place of musty lecture-notes and dry unproductive text-books. Not only have the professors aimed at being successful teachers, but many of them have themselves led the way in original discovery. They have likewise kept themselves and their students abreast of the progress of research all over the world. Hence the names of Continental men of science have become household words among the rising generation. We can readily understand and sympathise with the uncontrollable outburst of enthusiasm with which the students greeted the actual appearance among them of a Pasteur, a Helmholtz, and a Virchow.

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Silently and unconsciously perhaps the Universities are passing from the exclusive domination of the older learning. At Edinburgh the emancipation is far advanced, but has yet to take shape in a definite rearrangement of the curriculum of study. No thoughtful scientific man would advocate a merely scientific education. The foundations of every man's culture should be laid broad and deep in those humanising departments of thought which the experience of centuries has proved to be admirably fitted for the mental and moral discipline of youth. But the day is not far distant when it will be acknowledged that modern science must be admitted to a place with ancient philosophy and literature in the scheme of a liberal education, when in all our Universities provision will be made for practical instruction in scientific methods, and when at least as much encouragement will be given by fellowships and scholarships to the prosecution of original scientific research as has hitherto been awarded to classical study or learned indolence.

To those who hopefully look forward to the widening and broadening of University culture the Edinburgh festival is full of encouragement. Such a gathering of representative intellect has probably never before been assembled. Delegates from the oldest and youngest Universities of the world, from scientific societies and other learned bodies, brought their congratulations to their northern sister. But they felicitated her not so much because she had been a successful educational centre for three hundred years, as because she had held up the torch of scientific discovery, because her professors and graduates had widened the boundaries of knowledge and deciphered new pages in the great book of Nature. If such has been the result of the trammelled past with all its hampering traditions and vested interests, its obstructions and jealousies, what may we not anticipate for the liberated future! After the lapse of another century, what new conquests will there not be to chronicle, what new realms of discovery to celebrate! In this ever-advancing progress, the University of Edinburgh, which has done so much in bygone years, will doubtless more than hold her own. No centre of education and research has greater advantages in its favour. The comparatively small size of the city, the proximity of its lecture-rooms, laboratories and libraries to each other; its vicinity to the sea on the one hand and to a varied and picturesque country on the other, combine to offer exceptional advantages to the student. Not the least of its attractions is its own unchanging beauty, which never ceases to appeal to the eye and to stimulate the imagination. Long may Edinburgh remain a beacon of light in educational advancement, in the cultivation of scientific methods, and in the march of scientific discovery.

PRJEVALSKY'S TRAVELS IN CENTRAL ASIA

Third Journey in Central Asia. From Zaisan through Khami to Thibet and the Sources of the Yellow River.

By N. M. Prjevalsky. Russian. (St. Petersburg, 1883.)

THIS large work is the complete account of the third journey of Col. Prjevalsky to Thibet, notices of the progress of which from time to time appeared in our pages during the year 1880. The first journey, it will be

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remembered, was performed during the years 1870-73, when this distinguished traveller reached as far as the Lama monastery of Cheibsen near Lake Koko-Nor, and to Tsaidam, but was forced to abandon his intention of going to Lhasa, and so retraced his steps to Alashan. From thence he went to Peking, and returned to Siberia across the Desert of Gobi. The second journey was undertaken from Kuldja to the Lake Lob Nor across the Tian-shan Mountains. On the third journey Col. Prjevalsky started from Zaisan, passing through Barkul Khami, Sa-tzhei, and Tsaidam, where he reached the country he had explored on his first journey. He now proceeded to carry out his former intention of going to Lhasa, and he struggled over the great plateau of Tan-la till he reached the town of Boomtza. At Nap-chu, in the neighbourhood of this town, he was informed that he would be allowed to proceed no further in the direction of the capital of the Dalai Lama. He was then a little more than 160 miles from Lhasa. Negotiations were useless: he was not allowed to proceed. Contenting himself with taking a portrait of the messengers from the Dalai Lama, he turned northwards and retraced the long and wearisome march across the Tan-la plateau. The winter of 1879-80 was occupied with this march and with the observations upon the manners and customs of the people, as well as investigations into the flora and fauna of the district he was passing through. Prjevalsky possesses in an eminent degree the buoyant spirit of the traveller which enables him to observe calmly and critically the surroundings in which he finds himself, even though he is overcome with hardship or pressed by the weight of disappointment. Returning to Tsaidam, he set out on his way to Lake Koko-Nor, where he had been in the year 1873. He remained in this neighbourhood for some time, and he followed the course of the Hoang-ho for about 150 miles. This part of his journey took him over new ground, and his explorations of these upper waters of the Yellow River or Hoang-ho are of the utmost value. He followed the course of the river as far as Gui-dui, which forms an oasis amidst great arid mountain-chains. It was so difficult to advance and forage was so scarce that Prjevalsky turned back from the Hoang-ho and directed his steps towards Lake Koko-Nor. The rain, which had stopped for a time, recommenced, and was often accompanied with severe cold, which added materially to the discomforts of the journey. The monastery of Cheibsen was revisited after the lapse of about seven years, and there Prjevalsky was well received by the priests, whose acquaintance he had made on his former visit. The journey was continued through Nan-shan and Alashan amidst the wildest mountain scenery, till a descent was made upon the great Desert of Gobi. The change was great from the high mountains of Pan-cu to the waterless expanse of the desert, but Prjevalsky was always ready with his notebook as well as with his gun; and the result is that this volume contains a mass of information for the ethnologist as well as for the naturalist. The return was made in safety through the desert to Urga and Kiakhta. This is a brief outline of the journey recorded in these pages, and the only regret one has is that so few amongst us can read the language in which it is written. It is to be hoped that the volume will ere long be translated into our own language.

The simplicity of the style, the novelty of the subject, the interest of the narrative, and the personality of the writer, who has reached such a high position amongst adventurous travellers, combine to make this a most invaluable acquisition for the library of the naturalist as well as of the geographer. Very many new species have been obtained of both plants and animals, and one of the most important of the discoveries recorded is that of a new species of horse. Polyakoff has proposed to call this new species (of which a specimen is to be found in the museum of the Academy of Sciences in St. Petersburg) after the discoverer—*Equus Prjevalskii*. But the new species of plants and animals are so numerous that it has been proposed to apply a special name to the flora and fauna of the district, which are found to differ considerably from those of Western China.

OUR BOOK SHELF

Deutsche Kolonien. Ein Beitrag zur Besser Kenntniss des Lebens und Wirkens unserer Landleute in allen Erdtheilen. Von Karl Emil Jung. (Leipzig: Freytag, 1884.)

DR. JUNG is well known as an accomplished writer, both on the scientific and economical aspects of the Australian colonies, in which he spent some years. His present brochure is one of much interest, though its immediate subject is beyond our scope. It is a curious fact that though the Germans have no colonies, they are probably, next to the English, the greatest colonisers of any European nation. Even according to the census returns, the German population of the United States is very great, and as Dr. Jung shows, it is much greater than it seems, for many of the earlier colonists have Anglicised their names, and been absorbed in the general population. To the culture of the States, and indeed to the intellectual side of all the colonies in which they have settled, the Germans have largely contributed. Dr. Jung gives interesting details of German migrations into England, Russia, Australia, South Africa, as well as the States, and from the ethnological standpoint his little work deserves the attention of the scientific student.

Catalogue de la Bibliothèque Japonaise de Nordenskjöld. Coordonné, revu, annoté, et publié par Léon de Rosny. (Paris, 1883.)

THIS collection of Japanese works in all departments of literature, which appears to have been collected by Baron Nordenskjöld while in Japan, has been presented by him to the Bibliothèque Royale at Stockholm. The editor, the veteran Japanese scholar, M. de Rosny of Paris, has not been satisfied with a bald catalogue, but has in many instances added descriptive and analytic notes of the contents, the character of the work, and its place in Japanese literature; and although the collection can hardly equal in extent and value those of several European libraries, we are not aware that such an excellent catalogue exists in any European language. The whole contains about 1000 works in over 5000 volumes, and is divided and subdivided by M. de Rosny with much nicety. The scientific works are not very numerous. On the exact sciences (arithmetic, geometry, algebra, astronomy, &c.) there are only 104 volumes, and on the natural sciences 445. But most of these are dated prior to the opening of the country to foreigners, and to the student who could examine them they would present an interesting picture of the state of scientific knowledge at various periods.